DOCUMENT RESUME

ED 097 122 PS 007 498

AUTHOR Walston, Herman Ervin
TITLE Materials, Equipment, and Primary Learning Factors Which Can Be Utilized by Early Childhood Education Planners in Devising Creative Playgrounds for Young Children.
PUB DATE 26 Mar 74
NOTE 37p.

EDRS PRICE MF-$0.75 HC-$1.85 PLUS POSTAGE
DESCRIPTORS *Child Development; Childrens Games; Creative Development; *Early Childhood Education; Emotional Development; Equipment; Guidelines; Intellectual Development; Landscaping; *Outdoor Education; Personnel; *Physical Design Needs; Physical Development; Play; Playground Activities; *Playgrounds
IDENTIFIERS Adventure Playgrounds

ABSTRACT

This paper presents suggestions and guidelines for planning creative outdoor learning environments and experiences for young children. The discussion focuses on the fact that children learn more readily and develop better physically, intellectually, emotionally, and socially when their play is allowed to be creative and innovative in nature. The physical characteristics of playgrounds which foster creativity are described and nine stipulations for play are offered as guidelines to playground planning and development. Suggestions for play equipment and playground personnel are given. An adventure playground is described in which children, under supervision, are free to build their own play structures from a variety of materials provided. A final section contains directions for activities involving playground materials and equipment, such as acting games, sand and water games, and games using old car tires and ropes. (SDH)

U S DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION
THIS DOCUMENT HAS BEEN REPRO
DUCED EXACTLY AS RECEIVED FROM
THE PERSON OR ORGANIZATION ORIGIN
ATING IT. POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRE
SENT OFFICIAL NATIONAL INSTITUTE OF
EDUCATION POSITION OR POLICY

AUG. 23 1974

ED 097122

MATERIALS, EQUIPMENT, AND PRIMARY LEARNING FACTORS WHICH CAN BE UTILIZED BY EARLY CHILDHOOD EDUCATION PLANNERS IN DEVISING CREATIVE PLAYGROUNDS FOR YOUNG CHILDREN

by

HERMAN ERVIN WALSTON

INSTRUCTOR OF HOME ECONOMICS

BOWLING GREEN STATE UNIVERSITY

BOWLING GREEN, OHIO

MARCH 26, 1974

PS 007498

TABLE OF CONTENTS

UNIT		PAGE
I.	INTRODUCTION AND THE PROBLEM	1
	The Problem	1
	Statement of the problem	1
	The Value of Play in the Life of a Child . . .	2
	Benefits of Outdoor Play	5
	What Are Creative Playgrounds?	7
	Research and evaluation	9
II.	CHARACTERISTICS OF THE IDEAL OUTDOOR PLAY AREA .	9
	Playground for small children	12
	Planning	13
III.	THE EQUIPMENT THAT DEVELOPS THE BENEFITS OF CREATIVE PLAYGROUNDS	14
	Play Equipment	14
	Small equipment and supplies	16
IV.	WAYS TO INSURE BENEFITS OF OUTDOOR PLAY IN VARIOUS AREAS	17
	Natural "Renaissance Men"	17
	Play leadership.	19
	Training	20
	Adventure playgrounds	21
	The material for building	22
	Fencing	22

(continued)

TABLE OF CONTENTS (continued)

UNIT		PAGE
	Directions for Games and Other Stimulating Activities to Insure Children's Involvement With Equipment	23
	Acting	23
	Sand play	24
	Water play	25
	Old car tires	25
	Play with ropes	26
	What is learned from games	26
CONCLUSIONS		28
BIBLIOGRAPHY		30
APPENDIX		31

INTRODUCTION

The fundamental purpose of contemporary education in this country is to provide the opportunity for every child to develop his maximum mental, physical and social potentials so that he can take his place as an active member of a democratic society. Our task, as educators, is to translate this purpose into a program of instruction that will develop within each individual the capacity to meet the physical and psychological tasks that are ever-present in a dynamic and challenging society. Today and in the foreseeable future we need individuals who possess a diversity of knowledge, a capacity to think critically, an ability to meet emotional stresses and the physical fitness to meet the requirements of work, personal and national emergencies, and leisure time pursuits. Obviously, the foundation of each of these qualities begins in the home; however, it soon becomes the responsibility of elementary school teachers to continue teaching them. From kindergarten on, teachers must make a judgment as to the place, importance and emphasis of academic, physical and social experiences that will aid them in developing each child toward the stated aims of education.[1]

---

[1] Glen Kirchner, Physical Education for Elementary Children (Dubuque, Iowa: Wm. C. Brown Company Publishers, 1966), p. 3.

Research shows clearly that the first four or five years of a child's life is the period of most rapid growth in physical and mental characteristics and of greatest susceptibility to environment influence. Consequently, it is in the early years that deprivation is most disastrous in its effect.[2]

The purpose of this study is to present what is a comparatively new idea in the development of the whole child - the value of creative play, the equipment and materials required for creative playgrounds, and their intrinsic value over the conventional playgrounds of the present.

I. THE PROBLEM

Statement of the problem. To discover and investigate the materials and arrangements which can be utilized by Early Childhood Education Planners in planning creative outdoor learning environments and experiences which lead to the development of the child in his entirety - physically, intellectually, emotionally, and socially.

---

[2] Arvid Bengtsson, Environmental Planning for Children's Play (New York: Praeger Publishers, 1970), p. 14.

THE VALUE OF PLAY IN THE LIFE OF A CHILD

Play is one of the great physical needs of man, along with food, rest, elimination, and sex. It is leisure-time activity voluntarily selected and done that brings satisfaction and recreation to the individual. Life abounds with the rhythm of work-play, energy breakdown - energy build-up, sorrow-joy, health-sickness. "All work and no play makes Jack a dull boy," but it can also make Jack a sick boy, indeed. People need to get away from the drabness, dullness, and monotony of their lives whether they are six, sixteen, or sixty. They need a change to do activities that are challenging, adventurous, and fun!

What is work for one person may be play for another. The manual laborer who lays brick eight hours a day for five days is working. Winston Churchill, on the other hand, when prime minister, of England, was known to lay bricks for fun; it was one of his many hobbies. It has been said that the main difference between work and play is the degree of pleasure that comes from either. What is hard work for one brings much joy to the other. What one does during his hours of free time may be creative provided that it brings deep satisfaction and release from tension, is done voluntarily without pay, and gives one a change from tension from his usual routine. Children need to be taught to play as much as they need to be taught to work, for play and work are inseparable. We work so that we can play, but we play

so that we can work more productively, whether we are young or old.[3]

There are three types of play: (1) motor (hitting a tennis ball, swimming, riding a bicycle), (2) sensory (watching a sunset, listening to a symphony or jazz, or tasting a cake one has made), and (3) intellectual (going to lectures, the movies, reading a comic book or Shakespeare). Through recreative activity the child and the adult are revitalized, refreshed, and recreated. Since many children sit most of their time in school and are directed in many of their activities by an adult, they must become more active and self-directed in their play during their free time.[4]

Children are dynamic, exploratory creatures. The vast portion of their early learning comes from and through movement. One is amazed at the number of things a one year old child can do. His greatest life learning period is between the years of one to six, and the more a child hears and sees the more he wants to hear and see. By the time a child is three years old he has pretty much learned how he should and will deal with the world. If he is normal, throughout life he will continue to add skill upon skill until a peak is reached. Children will find deep satisfaction in the big muscle movements of running, skipping,

---

[3] Maryhelen Vannier and Mildred Foster, Teaching Physical Education in Elementary Schools, Fourth Edition, (Philadelphia: W. B. Saunders Company, 1968), p. 13.

[4] Ibid.

hopping, and jumping. Joy comes in pretending, in moving to sounds, in playing tag and "it," and in chasing and being chased.[5]

By using acceptable emotional outlets a child is gaining control over his emotions. He must learn to use verbal outlets for minor feelings of frustration and acceptable physical outlets for his strong emotions. The importance of this learning cannot be overemphasized. While physical play provides expression for the strong negative emotions, it also provides for positive feelings of pleasure: the satisfying feeling of accomplishment in achieving a new skill or in becoming aware of an existing skill, the pleasurable feeling of having exercised to the point of fatigue, but not beyond it, the joy of having played with others in a game situation, and the satisfaction of contributing to the game.[6]

Within the total program each child has opportunity for well-rounded physical development. Both large and small muscles grow stronger. Muscles develop in arms, wrists, hands and fingers, neck, shoulders, abdomen, pelvis, legs, ankles, and feet. The child learns to coordinate movements of different muscle groups, and to alternate both arm and leg movements. He develops the use of his sense of balance.

Each child gains self-confidence and a sense of achievement as he builds his physical skills. His new skills help him find a place in his peer group. He feels that he belongs to the group and is wanted by the other children. In game situations

---

[5] Ibid., p. 14.

[6] Helen Heffernan and Vivian Edmiston Todd, The Kindergarten Teacher (Boston: D. C. Heath and Company, 1960), p. 123.

he explores the roles of leader and follower, of winner and loser, and observes that other children do also. On the apparatus he takes turns with others, and plays in co-operation with, or parellel to, others, thus each child develops socially at the same time that he develops physically. In fact, the whole child develops in his entirety. The teacher or supervisor furthers this development in all its aspects: physical, intellectual, social, and emotional.[7]

BENEFITS OF OUTDOOR PLAY

The many and varied activities of outdoor play are tools through which a child learns about himself; what he is capable of doing, how he can control his body; how he can adapt to the forces about him (whether these forces be space, inanimate objects, or other people); and how he can maintain his state of well-being. Proficiency in a wide variety of movement skills give him personal and social mobility in his work and play experiences and sets a foundation for future success. Movement is the key to the means of reaching these values previously stated.

Specific aims of outdoor play in the elementary school are:

1. To promote the optimum physical development of each child;
2. To develop the motor skill ability of each child in each child in terms of performance, adaptability, ingenuity, and efficiency in coping with new and varied situations;

PS 007498

---

[7] Ibid., p. 124.

3. To develop physical and mental coordination;

4. To provide situations where each child can feel a sense of achievement through his own efforts and perseverance;

5. To provide opportunity for as wide and experience as possible in all types of movement exercises;

6. To provide situations where each child must learn to work alone, to cooperate and compete with himself and others, and to cooperate and compete at the same time;

7. To provide situations where each child must exert inquiry, expression, creativity, and self-control in movement experiences.

8. To help to develop a healthy body by playing in the open air.[8]

Through these activities and skills a child learns.[9] Frederick J. Moffitt evaluated the benefits of play thusly:

THUS A CHILD LEARNS

> . . . Thus a child learns; by wiggling skills through his fingers and toes into himself; by soaking up habits and attitudes of those around him; by pushing and pulling his own world.
>
> . . . Thus a child learns; more through trial than error, more through pleasure than pain, more through experience than suggestion, more through suggestion than direction.
>
> . . . Thus a child learns; through affection, through love, through patience, through understanding, through belonging, through doing, through being.
>
> . . . Day by day the child comes to know a little bit of what you know; to think a little bit of what you think; to understand your understanding. That which you dream and believe and are, in truth, becomes the child.
>
> Frederick J. Moffitt, Chief,
> Bureau of Instructional Supervision
> New York State Department of Education

---

[8]Evelyn L. Schurr, Movement Experiences for Children: Curriculum and Methods for Elementary School Physical Education (New York: Appleton-Century-Crofts, 1967), p. 16.

[9]Vannier and Foster, op. cit., p. 79.

WHAT ARE CREATIVE PLAYGROUNDS?

Play is the child's work. The world is his laboratory, and he is its scientist. Play is the research by which he explores himself and his relationship to the world.

The prevailing notion of play takes little cognizance of the potentialities either for joy or for growth. To many adults play is only a holding action, a leftover time during which a child must be kept busy and out of mischief. Just as a TV becomes an electronic baby-sitter, so do our existing play facilities become great, gray outdoor nannies, incarcerating children and protecting them from experience and involvement. The air may be fresh, but the play is stale, and many children are saying exactly this when they escape the confines of a dull playground to play in a nearby gutter, street, or empty lot. There is no contest between the richness outside the playground - color, movement, people, life - and the dreariness of the standard playground trio - swing, slide, and seesaw.

Most adults do not yet understand that a child plays without waiting for specific times or places to play. We find it hard to remember that play and learning are a continual and integrated process. We try to fragment the child's life - - a time to play, a time to learn, a time to rest. The child doesn't recognize a special time to play, though; his whole world is an adventure. It is adults who punctuate the day with "proper" times for play (usually not adequate) and punctuate the city with "proper" areas for play (usually not appropriate).

Play facilities are uniformly dreary because of a combination of factors - apathy, misconception of children's needs, lack of reasonable alternatives as models, and an exaggerated emphasis on the management and maintenance of facilities. Lady Allen of Hurtwood, a landscape architect in England who has championed the rough and tumble "adventure playgrounds" (where children build caves and cabins out of leftover materials dumped onto the site), has said that American playgrounds are designed for the insurance companies. Obviously, playgrounds are not being designed for the child.[10]

Preconceptions that the traditional swing, slide and see-saw provide a desirable play experience must be questioned. Each of these traditional pieces creates no more than a one-dimensional play experience, and with it a one-dimensional child. However, an important distinction is necessary. To question this stereotyped playground equipment is not to deny the activities provided by them; the swinging, sliding, and balancing they provide are natural loves of every child. The challenge is to provide these activities in a way that does not automatically set up a single predetermined and limited pattern.[11]

A working idea of a playground that does not "march" leads us to research into conceiving one which does. This is done by first researching children; finding out what they like to do most,

---

[10] M. Paul Friedberg with Ellen Perry Berkley, Play and Interplay (London: The Macmillan Company, 1970), pp. 35-37.

[11] Ibid., p. 37

by observing them as they play when they do not realize that they are being observed. Then we set up our playground.

Research and evaluation. Expensive equipment is not required, since the best place to study the child in in a natural setting, where he is free to explore anything, natural or man-made, and is not constrained by the configurations of specific "equipment." He may climb a tree or throw a rope over a branch for a swing or jump from a rock or find water, sand, or tree branches to play with. Or build things, or demolish things. When the world is open to him his imagination puts it to good use.

If we see what a child makes of his environment when there are few constraints, we can bring new possibilities into the urban play environment, working with them in what we already know from other avenues of research about childhood learning and development. The aim is a multifaceted environment, existing on physical, social, and educational levels and suited to the child who can develop, through play, on all these levels at once.[12]

Creative playgrounds are those play areas (large or small) which provide equipment and opportunity for innovation and development of strength balance, skills, and to be imaginative in the use of their skills.[13]

II. CHARACTERISTICS OF THE IDEAL OUTDOOR PLAY AREA

The ideal playground for young children is a grassy area on a sunny, sheltered side of a building, a grassy vale, or a

---

[12] Ibid.

[13] Schurr, op. cit., p. 112.

gently sloping hill. The area could have trees for shade and climbing, a pond for water play, a garden and sand for digging. Additional natural stimuli and environmental conditions that will encourage the healthy activities of running, jumping, rolling, climbing, digging, lifting, swinging, sliding, pulling, pushing, crawling, creeping, skipping, balancing, walking, throwing, riding, reaching, and bending should be provided. Where natural conditions are not available to provide such activities, a combination of man-made playgrounds and equipment and natural conditions should be substituted.

The imaginative use of earth forms, landscaping and fencing should be used in playgrounds for young children in order to identify the interrelatedness and/or independence limits of the various simple and complex outdoor activity areas.[14]

An educationist's nine stipulations for play:

1. Playgrounds must always be designed and equipped with their function for play foremost in mind. We should not be surprised if the character of such grounds is as haphazard and casual as the character of some of the living rooms which we adults furnish without any imagination whatever.

2. Architects, landscape designers and educationists, have to work together in order to produce good solutions to playground problems. Only open, honest discussion and co-operation between architect, landscape designer and educationist offer any guarantee of getting playgrounds which are pleasing from the

---

[14] Harold E. Moore, Project Director. Parent-Child Educational Centers (Brochure). (Litchfield Park, Arizona, January, 1970), p. 19.

architectural and landscape angle and at the same time - and this is the decisive factor - are both good for play from the teaching angle, and attractive to children. The child and its play, and not the architecture, must be the decisive factor in designing playgrounds.

3. The playground is not meant to be for passive entertainment. It must encourage active, spontaneous and creative play.

4. More valuable than mechanical equipment for the playground are half-finished components and materials for play. Most playgrounds, however, are still largely dominated by inflexible contraptions which do not stimulate a child's imagination. A tree for climbing is more valuable that a round-about, a sandpit more important than swings, materials for building and experimenting more valuable than table tennis.

5. Design and equipment of the playground must conform to the typical games of the particular age group for which the ground is intended.

6. The playground must offer a variety of possibilities for play.

7. The design of the playground has to reflect the functions and movements of the different games.

8. The architect and the landscape designer ought to "play" himself when designing the ground. Playgrounds with natural or artificial hills, for example, are more popular with children than monotonous flat areas. A sandpit does not need to

be a square box. a ship-shaped sandpit, as often found in Denmark, Sweden, and Great Britain, is surely more attractive to every child.

9. For the construction, equipment and maintenance of a playground the co-operation of parents and neighbours should be sought. The parents must be made aware that the playground is their concern. It should not be a new parking area for children, but on the contrary it should bring the whole family together by way of play and games.[15]

Playground for small children. The older children must be able to take their small brothers and sisters to the playground. That is why an area must be set aside for smaller children, so that these can play without disturbing the older ones in their building activities or their artistic games or sports. This separate play while all are together enables the small children to be drawn gradually into the creative play of the bigger ones. Thereby the ideal transition from small children's games to the games of older boys and girls is achieved. Design and equipment of the playground for small children are identical in principle and in elements with those described in the previous stipulations.

In contrast to the typical playground for small children (for which we recommend improvised vehicles, to stimulate the imagination, such as an aeroplane made of tree trunks) the playground for all age-groups ought to have a real aeroplane, a real

---

[15]Alfred Ledermann and Alfred Trachsel, Creative Playgrounds and Recreation Centers (New York: Frederick A. Praeger, Publishers, 1968), p. 9.

car or tramcar. They should be able to examine a vehicle of that sort at close hand and manipulate it. Old vehicles serve also as "bridges", just as certain fascinating books prevent young people from reading rubbish and serve as a bridge towards books of literary merit. Similarly these old vehicles will entice from the streets juveniles who are nowadays mostly interested in things technical, and guide them towards creative play.[16]

Planning. The unplanned placing of play equipment possibly facilitates certain games but it does not result in a good playground from an educational point of view. Only a purposeful grouping of the equipment and the right apportionment of the different play areas facilitate those games which correspond to the age of the children and awaken in them creative playing activity and pleasure in discovery, exploration, and constructive work. A small children's playground has a special charm when it allows for a definite sequence of games. What we mean is the relationship between the different areas, the arrangement of a definite sequence in the positioning of the equipment, the exploitation of the possibilities of the site. A plot of land with contours is more attractive than a level one. Hills, play niches and hollows make the games varied and lively. A hill presents numerous possibilities - one can make a slide on it, tunnel under it with ducts to creep through, place Wendy houses on the hill top or cut out steps on the slope to serve as amphitheatre seats, and all sorts of other things.

---

[16] Ibid. p. 12.

The same care should be given to the placing and planning of lavatories: this subject, partly out of forgetfulness, partly because of financial consideration, is often neglected and yet the cleanliness of a playground is indivisibly linked with the appropriate solution of this problem.[17]

III. THE EQUIPMENT THAT DEVELOPS THE BENEFITS OF CREATIVE PLAYGROUNDS

Play Equipment

Little children delight in creeping into small shelters and playing house. Sawn off tree trunks of different thicknesses and different heights set in concrete to make ascending spiral steps are popular and inexpensive. The spaces between logs placed close together should be filled with cement to prevent toes getting caught and rubbish collecting. Stepping stones are also pleasant and inexpensive. Delightful yet roughly constructed symbolic animals are easy and inexpensive to make from tree trunks. These can be made by the boys of the local technical college or youth club, or by the park department, or by parents. The legs should be placed firmly in cement. Water pipes 3-5 feet in diameter are often used, either set in cement or left free to be moved.

For little children, slides are often placed on the decline of a hill and follow the slope of the bank. These low slides are made of metal and each is specially designed to fit the contours

---

17 Ibid.

of the hill. They are perfectly safe, good to look at, and need very little maintenance and are a good alternative to those with high approach steps.

Swings from motor tires are cheaper and less dangerous than the metal kind. A curved iron plate runs inside the top half of the tire through which the chains are securely bolted. Huts on two iron wheels, used by roadmen, are very strong and make excellent small houses and these, too, can often be obtained free from the council offices.

A low, free roof slanting down to the ground on two sides may be used both for protection against rain and for climbing and sliding purposes, with wooden slats fastened firmly to part of the roof.

Other suggested equipment includes narrow benches for balancing, asphalt walks for cars and trains, packing cases and electric or telephone cable spools and drums are good fun too. Perhaps the most popular piece of equipment that always gives keen delight, is a chest, first made in Sweden, of wooden building blocks. The chest is stoutly made and weather-proof and the front lets down on strong chains. It is five feet long, three feet wide and three feet high. Stored in the chest are 300 building blocks made of seasoned birch, treated with a red dye. They are various lengths from four feet to one foot. As the chest is completely weather-proof and can be securely locked, it can stand outside without damage all year round. However, in countries with snow or much rain the blocks may be stored and used indoors.

Play material should be adjusted to the climate and the seasons. During periods when they are not suitable, they can be removed for repairs and repainting. In this way they will have a new appeal when they are returned.[18]

A separate area for placement of equipment should be set aside and protected by a soft surface of sand, tanbark, or wood shavings under and around them. Some equipment not previously mentioned are:

Rails or beams
Turning bars, horizontal bars, parellel bars, climbing poles - made from used pipe and set in concrete
Tree trunks used for vaulting, balancing, climbing
Railroad tracks and ties; used for balancing
Discarded auto bodies
Wooden barrels
Concrete culverts, large cement blocks, large packing boxes, ladders set between two sturdy supports; used for exploratory climbing, crawling, and jumping.

Many items may be improvised. School shops, maintenance departments, fathers, or P.T.A. groups can often make or install some large apparatus equipment at cost less than purchased and installed commerically.[19]

Small equipment and supplies:

1. Color identification bands, made from pieces of muslin
2. Bowling pins acquired from bowling alley proprietors
3. Old bicycle and auto tires and tubes from service stations
4. Pins or boundary markers made from large plastic bottles filled with sand
5. Bases made from potatp sacks filled with grass or straw
6. Batting tee made from pipe covered by garden hose
7. Standard for nets and tether ball made from pipe set in a tire filled with cement.
8. Jumping ropes made from 16-pound sash cord cut into varying lengths with ends dipped in paint

---

[18] Lady Allen of Hurtwood and others (eds.), Space for Play (Nordlundes Bogtrykkeri, Copenhagen: The World Organization for Early Childhood Education, 1964), pp. 43-47.

[19] Shurr, op. cit., p. 112.

Small equipment and supplies (continued)

9. Wands made from broom handles or one inch dowels
10. Paddles of various type made in shop from three-quarter inch plywood
11. Beanbags made from old denim and filled with corn or beans
12. Medicine ball made from an old basketball filled with sand
13. Jumping boxes, vaulting benches, made from sturdy old tables or boxes.[20]

More materials and equipment will be listed later in the study under Materials and Sources.

IV. WAYS TO INSURE BENEFITS OF OUTDOOR PLAY IN VARIOUS AREAS

Natural "Renaissance Men"

Let us now look at play from another point of view, that of expression of the creative impulse. Most play is a continually creative impulse. Most play is a "drag" if not allowed to be of innovative quality. Our question must be: What happens to the vast creative potential of our approximately twenty million children as they mature. The pudgy adult who so alarms sociologists because of his habitat - a semidarkened room - his props: a beer can in his hand, his activity: myopically staring at a flickering television screen - this sad being was once a lively kid, expressing himself in color and form, happy to dance out a story, and inclined enthusiastically to join with other children in producing a play.

---

[20] Ibid., 116.

Child's play should continually stimulate and strengthen creative inclinations until they are capable of adult direction. Yet something in our environment, in the climate of play in this country, seems to inhibit creativity and to destroy the potential for inventiveness with which most children are born. Our problem, then, is not so much how many creative people we can give birth to, but how many of the creative people who are born we can keep.

Inside each child is a natural "Renaissance man," who merely needs the proper climate to grow into full maturity. The Renaissance man is one who is in command of the arts and the sciences and the philosophic attitudes - a fusion of skills, talents, and techniques; a man equally disposed toward spiritual enlightenment and material productivity. The Rennaisance man concept is now embodied in the liberal arts education, which is oriented toward providing an individual with sufficient material to feed all of his sensibilities and to teach him how to continue to teach himself.

The child's environment is far from that of his father or even an older brother. He must live in a changing world and learn to cope with it. In order to help develop new attitudes in early childhood we must develop new places to play take into account the enormous change in environment. And we must now face the fact that reading, writing, and arithmetic are no longer the sum total of all the skills and tools that Junior needs for his intellectual development. We cannot afford to

disregard Junior's "unofficial education" through play.[21]

We have discussed the physical properties of the creative playground yet we have not discussed the one factor that will insure maximum benefits from outdoor play: play leadership.

Play leadership. The playground is as much an element of town planning as streets and squares, and it should function at all times, more or less round the clock, even when there is no personnel. It is, however, only when personnel are present - so long as they are of the right sort - that a playground assumes its true identity.

A child needs someone to approach in critical situations, someone to talk to when everyone else is "silly", someone to ensure that the bully will not always get his way. As our towns become more impersonal, people more lonely, and as children without identity take to hanging about in doorways, so the importance of human concern and effort in our outdoor life increases, especially in relationship to playgrounds.

When a playground is provided with personnel there is greater scope for equipping and developing it in an appropriate manner. Loose material can be used to a greater extent where there are personnel, and it is only then that a child really gets a chance to display his own initiative. In order to create, something to create from is needed, and it is here that the

---

[21] David Aaron with Bonnie P. Winawer. Child's Play (New York: Harper and Row, Publishers, 1965), pp. 38-42.

shortcomings of play in life in a town are most evident. Too much is tidy and ready-made, therefore loose material from which the child can make things up must be made available.

Play must always be the first consideration when dealing with a playground. Organization is all right but only as a means, never as an end. A playground should never be like school, where the child is taught, and it is very important that personnel understand this, otherwise they may do more harm than good. A playground must have a free and easy atmosphere and it is vital that the personnel chosen are appropriate. Pedantic and methodical people are appropriate in many jobs in our society, but not in a playground.[22]

Training. For one or two playgrounds personnel can be hand-picked and chosen as convenient, but when dealing with a comprehensive system of playgrounds it is essential to have a training scheme of some kind. However, the need for training should not be exaggerated. In the first place the right people must be chosen, those who have the ability to handle and mix with children. When making selection for training, a test for this ability is far more important than good school qualifications.

The objectives of the training decides its worth. A playleader's work is entirely different from that of a school or kindergarten teacher's and the change to playleadership for such people is often difficult. A playleader's training need not be long or very comprehensive. Pratical experience is more important and it enables full advantage to be gained from the training.[23]

---

[22]Bengtsson, op. cit., p. 163.

[23]Ibid., p. 164.

Adventure playgrounds. The most important factor of an adventure playground is no doubt the play leader. Indeed, an adventure playground without a suitable leader is nothing more than a space filled with rubbish, and construction activity soon stops.

Everyone brought up in the country will have built huts of branches or sticks, farmyards of stones, pirates' caves in rock crevices and other kinds of constructions long since forgotten. Perhaps most town children, too, have at one time or another known the pleasure of building, even if in secret and with an uneasy conscience. Adventure play has always existed, even in town. Children hide in park bushes and perhaps dig themselves an underground cave hidden from passers-by. Or they will dare anything and fix a platform high up in a tree! They work almost day and night, well-knowing that they may be stopped at any time. The house sways wildly in the wind, and passers-by shake their heads at the "youth of today". Then someone rings the police or the park superintendent, and the fun is over for the time being.

The answer to this need is the adventure playgrounds that today have left the experimental stage. It is true that they are not always successful, but this is far from the rule, and the failures are often due to half-hearted enterprise. The adventure playground is a very valuable complement of the general concept of playgrounds, a section among others, just as natural and in no way more exclusive. What is required is a suitable area, linked in a natural way to the general layout of the

housing area, suitable materials, and good playground leaders.

The material for building. Although the demand for building material is high, almost anything can be used. Empty wooden boxes are useful and they create a lot of activity and can sometimes be used as a complete room. Timber of various lengths, old car tires, bricks, cardboard boxes, practically anything. Extensive stocks are not essential, but on the other hand the supply should not run out for any length of time as activities are soon affected. It is best to obtain "suppliers" - factories, shops, etc. - from whom a regular supply of waste material can be collected.

All tools must be of good quality. Hammers, saws, and pliers are the tools most needed and shoud be present in sufficient numbers to prevent interruption of activities. Nails must sometimes be rationed in accordance with the supply. It is often possible to enlist the support of parents and community organizations to keep playgrounds supplied with those few items that must be bought. A goodly amount can often be acquired from the suppliers themselves as donations which are tax deductible.

Fencing. All building sites present a disorderly and untidy appearance, and it would be too much to ask that the children's should be an exception. To expect rigorous orders or high aesthetic values would scarcely be consistent with the throw-out building material of the creative play we strive for. However, to incorporate all this activity in a polished and ready-formed town environment, an outside frame is necessary to prevent the disorder from overflowing and, at the same time keep people from looking in. The frame is valuable from the child's standpoint

as it prevents the adult world from penetrating too much and so provides a sheltered play area. Notting Hill Adventure Playground in London (Lady Allen of Hurtwood), which may well become a classic, is enclosed by a high wall. In other places, wooden fences and palisades have been successfully used. Indeed even industrial fencing is acceptable if it is complemented with greenery.

The fencing serves as a shelter and a space-creator, but it has another task, as a barrier. It is necessary, generally, to have fixed opening times, and to prevent damage, etc., it may be advisable to lock the entrance at other times.[24]

Directions for Games and other Stimulating Activities to Insure Children's Involvement With Equipment

Even with the proper type of playground, supervision, and materials are important to insure benefits of the playground, there must be some kinds of games to be interspersed with building and other informal types of play to keep the child interested. One type play is acting.

Acting is a common form of game. The favourite parts are those of father, mother, and child. Usually it is events that have made a deep impression on a child's experience which are acted out in one form or another. A visit to the hospital or dentist, a funeral in the family, etc., can provide inspiration for such games for weeks after the event and they often crop up from time to time over the years. The roles played are many and varied and the dialogue develops during the action.

---

[24] Ibid., pp. 158-163.

A stage can be an impromptu affair with the use of bedsheets or blankets for blankets. But why not make everything easier by having a simple, standard fixture in the playground's equipment preferably one which permits other uses? A small platform can be used for several purposes, especially if made of boards so that the children can dance there as well. Children love to move in time to music, and there seems to be a greater interest in music among youth today than ever before. Costumes are easily acquired from home. Mothers are always happy to rid themselves of some out of style garments in this manner. The more outlandish the better the children like them.[25]

Sand play. Everyone enjoys playing with soft and splendid sand, building castles, digging tunnels, baking cakes or whatever takes one's fancy. Sand can be moulded into almost anything one wishes, and in this lies its great value as a play material. It is one of the few construction materials that can easily be made available in an ordinary playground. Be lavish with sand by all means, but lavish it with sense. Large open areas easily come to look boring if they are not divided into sections that accord with the child's own scale. This can be done with suitable protective screens, which need not be very high to give the child a feeling of seclusion and intimacy. Furnishing the area with suitable toys can also contribute to this effect. A supply of water furnishes all the child needs for innovative play. The endless games present themselves.[26]

---

[25] Ibid., p. 170.

[26] Ibid., 180.

Water play. Children love water play in whatever form available. Puddles of water after a rain have always been attractive, and water that can be channelled and extended into lakes, waterfalls, etc., is a godsend which children know how to appreciate. Unfortunately, mothers are not always equally carried away by this phenomenon, and in the well-ordered housing estate puddles become daily less available.

What possibilities are there within planned playgrounds for bringing back water for play? There is certainly no lack of them. Few materials are more rewarding for a playground planner to work with, but usually it is cost which decides the matter. Planned water is not usually cheap, either in installation or operation. However, a spray, a water hose, a few small basins to splash in, these are some alternatives which can be provided without great expense. It is surprising how many activities can be planned around just a tiny bit of available water.[27]

Old car tires. Many games can be developed around the use of old car tires. They can be joined to make almost anything: a well to crawl into, a little cave to hide in. If a stack is laid on the ground it becomes a tunnel, and with the help of a frame of wood there is no limit to what can be achieved. One game, "Shipwrecked", can be played by placing tires at intervals on the ground with a fixed goal somewhere within the area. To get as far as possible without touching the ground while jumping from tire to tire is its objective and is much fun to children.[28]

---

[27] Ibid., 184.

[28] Ibid., 214.

Play with ropes. Play with ropes has become quite a marked feature of the more recent avant-garde playgrounds in England. It is often of the "Tarzan" variety. You swing by the ropes from tree to tree or from one platform to another. Its popularity is unbelievable and it attracts young people up to twenty years of age. Such games can be very advanced and naturally not without danger if equipment and method of suspension are not carefully supervised. This type of play can be arranged to offer varying degrees of difficulty, so that even the very young children are catered to. All that is needed is a platform at a suitable level and a rope hung at the right distance and height for a pendular motion to be achieved. More simple arrangements have been successfully tried and the field is wide open for further experimentation.[29]

What is learned from games.

Children like to act out adult situations and activities in play: store, church, service station, traffic cop, mountain climbing, etc. With a word here and there by the play leader the child learns to share, to take turns, to cooperate, to be courteous and polite, to care for their own safety and that of their playmates. He learns verbal outlets for minor frustrations and acceptable outlets for his strong emotions. He gains the satisfying feeling of accomplishment in achieving a new skill as well as muscle coordination. A child who has played traffic cop never has a problem as an adult in not respecting road signs.

---

[29] Ibid., p. 206.

There are any number of listings in the classified ads today for people with creative and innovative ability. Today's creative child is tomorrow's best paid employee or employer. Creative activities contribute to the development of the body, a child learns to dream and enter the world of fantasy, to become self-reliant and self-sufficient. He acquires skills with tools at an age when most children are learning to wind a mechanical toy. This development spills over into his home life and results in a more well-rounded young citizen.

The child learns to be a follower and a leader, a winner and a loser. He gains self-confidence in his play and a place in his peer group. He develops socially at the same time he is developing physically. In fact the child develops in his entirety - physically, intellectually, socially, and emotionally.[30]

---

30 Hefferman and Todd, op. cit., p. 124.

CONCLUSIONS

How well an individual learns anything depends upon the extent of practice and guidance involved. It is true that children acquire most of the basic movement patterns without direct teaching, but the refinement of the skills and the efficient use of the skills in relation to specific goals require a broader understanding and development of them than the child can acquire through trial and error alone. Early detection of errors in performance, and suggestions for improvement by a supervisor can forestall a fixation of the error and avoid a great deal of frustration.

This study was researched around an ages-old philosophy now being revived: That children learn more readily and become more well-rounded when their play is allowed to be creative and of an innovative mature. We have concentrated on creative playgrounds, their equipment, play leaders or supervisors, materials, suggested games, and benefits of these to the child.

The primary functions of the play leader of a creative playground are to provide the appropriate learning situations and an adequate understanding of the concepts to be learned which relate to creative play. In order to do both of these well, the leader must have a good understanding and knowledge of child growth and development factors, physiological factors, and a wide variety of activities. He must have an interest in the total development of children, an attitude that creative play is a

vital part of his curriculum, a good sense of humor, and a willingness to study new materials and ideas in the field of adventure playgrounds and the benefits to the child.

We contend that these playgrounds are of more value to the child for the simple reason that they let his imagination soar. In sterotype playgrounds the equipment lends itself, in most cases, to one activity only and the equipment itself can often be dangerous to the safety of small children. In creative playgrounds the uses for one piece of equipment are limited only by the imagination of the children.

Skills and games are learned there that they would learn nowhere else at such an early age. The only means of evaluating the playground is by evaluating the product of the playground: the child.

BIBLIOGRAPHY

Aaron, David with Bonnie P. Winawer. Child's Play. New York: Harper and Row, 1965.

Bengtsson, Arvid, Environmental Planning for Children's Play. New York: Praeger Publishers, 1970.

Friedberg, M. Paul with Ellen Perry Berkley. Play and Interplay. London: The Macmillan Company, 1970.

Heffernan, Helen and Vivian Edmiston Todd. The Kindergarten Teacher. Boston: D. C. Heath and Company, 1960.

Kirchner, Glenn. Physical Education for Elementary School Children. Dubuque, Iowa: Wm. C. Brown Company, Publishers, 1966.

Lady Allen of Hurtwood and others (eds.). Space for Play. Nordlundes Bogtrykkeri, Copenhagen: The World Organization for Early Childhood Education, 1964.

Lederman, Alfred and Alfred Trachsel. Creative Playgrounds and Recreation Centers. New York: Frederick A. Praeger, Publishers, 1968.

Moore, Harold E. Parent-Child Educational Centers (Brochure). Litchfield Park, Arizona, January, 1970.

Schurr, Evelyn L. Movement Experiences for Children: Curriculum and Methods for Elementary School Physical Education. New York: Appleton-Century-Crofts, 1967.

Vannier, Maryhelen and Mildred Foster. Teaching Physical Education in Elementary Schools. Philadelphia: W. B. Saunders Company, 1968.

SUGGESTED EQUIPMENT AND MATERIALS FOR A CREATIVE PLAYGROUND AND WHERE TO FIND THEM

EQUIPMENT OR MATERIALS	A FEW SUGGESTED USES	SOURCE
Steel or iron tubing	Constructing Climbing trees	Local water company Sheet metal works Ornamental Iron Co.
Bricks	Constructing Climbing wall	Local brickyard Construction Co. (culled or seconds)
Concrete culverting Clay tile pipe	Tunnels Bridges Prehistoric animals	Concrete companies City Sewerage Co. Telephone company
Tree trunks Trunks with branches	Bridges Animals Ships For climbing Tree houses Fences	City Electric Co. Neighbors Lumber mills
Vari-sized blocks from tree trunks	Innovative assemblying e.g., stepping pyramids	
Sand	Sand Pit For mortar mixing Paving play area	Beach Sand & Gravel Pits Construction Co's.
Wooden blocks (vari-sized)	Building Stacking Pretend furniture	City Utility Co. Lumber Companies (discards)
Ropes, rope ladders, and climbing nets	For swinging games Climbing Making auto tire swings	Hardware stores Ship yards
Barrels	Fantasy houses For rolling	Distillery Hardware stores
Discarded fiberglass petrol tanks with multi-colored acrylic glass bulges	To play in and climb on Submarine play Space capsule	City Gas Companies (Western states & England)

EQUIPMENT AND MATERIALS AND WHERE TO FIND THEM (continued)

EQUIPMENT OR MATERIALS	A FEW SUGGESTED USES	SOURCE
Rectangular, polyethylene containers in bright colors (various heights)	Play houses Play towns, stacked Stacked for town-houses	Textile companies (used for fabric storage)
Revolving plastic rollers between plastic bars (originally components of a conveyer belt)	An unusual slide to roll down and climb up	Industries
Discarded or imperfect coverings for jet engine of DC 9 aircraft (round) Plastic beads	To serve as a sanitary "sand box" filled with the plastic beads of various sizes and colors, which the American farmers mix with poultry food to prevent hens from over-eating	Aircraft plant (imperfects) Junked planes station Beads from poultry supply houses
Electric wire spools (various sizes)	Tables Stools Restaurant counter	Local electric co.
Discarded auto body	To learn fundamentals of driving Recognize traffic signs To climb in & over	Automobile junk yard
Automobile tires	To roll, to stack for jumping and climbing For safe swings	Auto junk yards Service stations
Wooden crates Cardboard boxes	To furnish the lumber for building projects For furniture	Furniture stores Hardware stores Freight houses
Wagons	For make-believe transportation Base for outdoor stage for theatrical performances	Farms

(continued)

EQUIPMENT AND MATERIALS AND WHERE TO FIND THEM (continued)

EQUIPMENT OR MATERIALS	A FEW SUGGESTED USES	SOURCE
Chicken wire	To enclose child-made zoo	Hardware stores Building supply houses Poultry supply houses
Discarded airplane	For flyers and mechanics of tomorrow	Junked plane stations
Straw or hay	For tumbling Thatching huts	Local fields in fall of year Animal fodder from commissaries
Rocks	For climbing Damming a stream for a pool Making waterfalls	Road construction sites Wooded areas Gravel works
Huts on iron wheels used by roadmen	play houses	City council office
Railroad tracks and ties	For balancing	Railroad companies construction crews